METHOD AND SYSTEM FOR
MULTIPROCESSOR GARBAGE COLLECTION

5 ## Abstract of the Invention

A garbage collection system and method in a multiprocessor environment having

a shared memory wherein two or more processing units participate in the reclamation of

garbage memory objects. The shared memory is divided into regions or heaps and all

10   heaps are dedicated to one of the participating processing units. The processing units

generally perform garbage collection operations, i.e., a thread on the heap or heaps that

are dedicated to that the processing unit. However, the processing units are also allowed

to access and modify other memory objects, in other heaps when those objects are

referenced by and therefore may be traced back to memory objects within the processing

15   units dedicated heap. The processors are synchronized at rendezvous points to prevent

reclamation of used memory objects.